# **Annual Service Quality Report**

# **SECTION ONE**

Year Ending December 31, 2004

DTE FORM - A



#### **FORM A (Gas Companies)**

#### **NSTAR Gas Company**

	Years in	Mean and	Performance	
PENALTY PROVISIONS	Database	Benchmark	in 2004	Comments
		61.30%		Telephone statistic based on Calls
Telephone Answering Factor (%)	7	(+/- 20.84%)	77.66%	Handled within 30 Seconds.
				Tracking emergency calls started in
Emergency Answering (%)	2	NA	83.20%	2002.
				Tracking non-emergency calls started in
Non-Emergency Answering (%)	2	NA	76.69%	2002.
		99.62%		Tracking service appointments started in
Service Appointments Kept (%)	4	(+/- 0.12%)	99.72%	2000.
		97.78%		
Meter Reads (%)	7	(+/- 1.55%)	97.71%	
		0.955		
Consumer Division Cases (Cases/1000 customers)	10	(+/- 0.219)	0.699	
		\$33.37		
Bill Adjustments (\$/1000 customers)	10	(+/- \$26.77)	\$38.27	
Lost Time Accident Rate (# of acc/200,000 employee		8.62		
hours worked)	10	(+/- 3.96)	1.40	
				Benchmark fixed @ 95.00% by the
Response To Odor Calls (%)	6	95.00%	99.46%	Department

#### **FORM A (Gas Companies)**

#### **NSTAR Gas Company**

	Years in	Mean and	Performance	
ADDITIONAL REPORTING	Database	Benchmark	in 2004	Comments
		Union	Union	
		392	2128	
		Management	Management	
Staffing Levels	8	172	847	
Restricted Work Day Rate (# of acc/200,000 employee				
hours worked)	10	3.42	3.53	Based on most recent 10 years
Property Damage > \$5K (#)	3	NA	0	
				Performance in 2003 is estimated
Unaccounted For Gas (Mcf)	10	NA	1,721,708	pending filing of DTE Annual Return
			54	
Capital Expenditures (# of projects and total \$)	10	\$20,975,000	\$30,447,000	
Spare Component & Inventory Policy	NA	NA	NA	
Customer Surveys (scale 1-7):				
Random (Overall Customer Satisfaction Survey)	2	NA	91.4%	
Callers (Post-Transaction Survey)	2	NA	91.0%	
Accidents				Reported above for Property Damage
Customer Service Guarantees (#; total \$)				
# of Payouts	3	NA	20	
\$ of Payouts	3	NA	\$500	

# Annual Service Quality Plan Performance Report

# **SECTION TWO**

Year Ending December 31, 2004

Historical Performance Data



#### **SECTION 2**

#### NSTAR Gas Company Performance Review for Year Ending December 31, 2004

#### I. Introduction

On April 17, 2002, the Department of Telecommunications and Energy (the "Department") approved a Service Quality Plan (the "SQ Plan") for NSTAR Gas Company ("NSTAR Gas," or the "Company"). In accordance with the terms of the SQ Plan, NSTAR Gas filed its first annual service-quality report on March 1, 2002. That filing established the benchmarks (using data through 2001) against which performance in the 2002 calendar-year period would be measured. In this section (Section 2) of the filing, the Company reviews: (1) the historical data underlying those benchmarks; (2) the performance results for 2004; and (3) the comparison of 2004 performance results to the established benchmarks. Items (2) and (3) are provided in this section at Schedule 1, at page 1. Item (1) is provided in Schedule 1, at page 2.

In <u>Section 3</u> of this filing, the Company has provided documentation for the reliability and safety requirements that are subject to the reporting requirements of the SQ Plan.

Also in Section 3, the Company has provided updated historical performance data through December 31, 2004. Based on this data, the Company has calculated the benchmarks that will be applied to evaluate 2005 performance data in next year's filing. In that regard, the Company has recalculated benchmarks for three measures for which there was less than the requisite level of data as of December 31, 2001. For these three measures, the benchmarks applied next year are calculated using data through December 31, 2004. As provided by the SQ Plan, benchmarks that were calculated using the requisite level of data as of December 31, 2001, are fixed for the period of the SQ Plan. The fixed and updated benchmarks for 2005 are set forth in Appendix 8.

Specifically Section 3 contains the following:

- Appendix 1: Customer Surveys
- Appendix 2: Restricted Work Day Data
- Appendix 3: Unaccounted-For Gas
- Appendix 4: Damage to Company Property In Excess of \$5,000
- Appendix 5: Capital Expenditures
- Appendix 6: Spare Component and Acquisition Inventory Policy
- Appendix 7: Staffing Levels

• Appendix 8: Updated Historical Data and Calculation of Benchmarks for 2004 Performance

#### II. Performance Review for Year Ending December 31, 2004

#### A. <u>Customer Service and Billing Performance Measures</u>

#### 1. <u>Telephone Service Factor</u>

For the Telephone Service Factor, the Company is required to track and report data on the percentage of telephone calls from customers that are handled within a 30-second time interval, including both emergency and non-emergency calls. NSTAR Gas began collecting data based on the percentage of calls answered within 30 seconds in 1997. Based on available data through 2003, the Company's benchmark for this measure is 61.30 percent. In 2004, the Company handled 77.66 percent of calls within 30 seconds, which was within one standard deviation of the benchmark.

Because the 2004 performance benchmark calculated for the Telephone Service Factor was based on less than 10 years of historical data, the Company has updated this benchmark to include 2004 performance. As shown in Appendix 8, the benchmark against which 2005 performance will be measured has increased from 61.30 percent to 63.35 percent.

#### 2. Service Appointments Met as Scheduled

As of January 1, 2000, the Company instituted a system to compile statistics on the percentage of service appointments met by Company personnel, excluding appointments missed by the customer. A "service appointment" is defined as a mutually agreed upon arrangement for service between the customer and the Company where the arrangement specifies the date for the Company's personnel to perform a service activity that requires the presence of the customer at the time of the service. Based on available data through 2003, the Company's benchmark for this measure is 99.62 percent. In 2004, the Company handled 99.72 percent of Service Appointments, which was within one standard deviation of the benchmark.

Because the 2004 performance benchmark calculated for Service Appointments Met was based on less than 10 years of historical data, the Company has updated this benchmark to include 2004 performance. As shown in Appendix 8, the benchmark against which 2005 performance will be measured has increased from 99.62 percent to 99.64 percent.

#### 3. On-Cycle Meter Readings

NSTAR Gas is required to report on the percentage of meters that are actually read by the Company in accordance with the meter-reading cycle. Based on available

Effective January 1, 2002, the Company began to measure the percent of calls handled within a 20-second time period. For this performance measure, the Company handled 74.76 percent of calls within 20 seconds during 2004.

data through 2003, the Company's benchmark<sup>3</sup> for this measure is 97.78 percent. In 2004, the Company achieved 97.71 percent of on-cycle meter reads, which is within one standard deviation of the benchmark.

Because the 2004 performance benchmark calculated for On-Cycle Meter Readings was based on less than 10 years of historical data, the Company has updated this benchmark to include 2004 performance. As shown in Appendix 8, the benchmark against which 2005 performance will be measured has changed from 97.78 percent to 97.75 percent.

#### B. Customer Satisfaction Performance Measures

#### 1. Consumer Division Cases

The Company is required to measure its performance in relation to the number of customer-complaint cases filed with the Department's Consumer Division. Based on the 10 years of data provided to the Company, the performance benchmark shown on Schedule 1 is 0.955, which will remain fixed for the duration of the service-quality plan. In 2004, the number of Consumer Division cases was 0.699, which generated an offset for the Company.

#### 2. Billing Adjustments

The Company is required to measure its performance in relation to the amount of revenue adjustments that result from the Department's intervention in a billing dispute with a residential customer. This is based on data that is compiled and reported by the Department and then provided to the Company. Based on the 10 years of data provided to the Company, the performance benchmark shown on Schedule 1 is \$33.37, which will

Specifically, during 2003, meters in the towns of Waltham and Westwood, which had historically been read out of "NSTAR Gas Company Meter Reading Offices," were reassigned to be read out of "Boston Edison Company Meter Reading Offices." In the context of this operational change, the internal statistical reporting for Off-Cycle Meter Reading performance was altered inadvertently to report these meter reads by the office that was performing the meter reading, rather than by the Operating Company under which the meter reads were to be reported in the Company's ASQR. Accordingly, the revised 2003 performance for On-Cycle Meter Reading for Boston Edison and NSTAR Gas is as follows:

2003	METER	READING	<b>Boston Edison</b>	<b>NSTAR Gas</b>
PERFORM	ANCE			
Reported Ma	arch 1, 2004		94.08 %	96.92 %
Revised			93.91%	97.12%

As a result of incorporating these revised figures into each company's calculation of benchmarks for 2004, Boston Edison's and NSTAR Gas's revised 2004 benchmarks for Meter Reading performance are as follows:

2004 BENCHMARKS	Boston Edison	NSTAR Gas
Reported March 1, 2004	90.96%	97.75%
Revised	90.93%	97.78%

These revised 2004 benchmarks have been incorporated into each company's calculation of their respective 2005 benchmarks for this measure (see, e.g., Appendix 8, infra).

<sup>&</sup>lt;sup>3</sup> The 2004 benchmarks for On-Cycle Meter Reading performance for Boston Edison and NSTAR Gas have been revised since each company's last ASQR (<u>see</u>, Boston Edison ASQR, Appendix 12 and NSTAR Gas ASQR, Appendix 8, each dated March 1, 2004) to account for a reporting error relating to operational changes in meter reading assignments across the NSTAR operating service territory. These revisions are being made for reporting purposes only, as both Boston Edison and NSTAR Gas were in net offset positions relating to their respective 2003 service quality performance.

remain fixed for the duration of the SQ Plan. In 2004, the number of Billing Adjustments was \$38.27, which was within one standard deviation of the benchmark.<sup>4</sup>

#### C. Safety and Reliability Performance Measures

#### 1. Response to Odor Calls

The SQ Plan requires the Company to measure its performance in relation to its response to all Class I and Class II odor calls. Until the Company records 10 years of historical data and can establish a benchmark for its Response to Odor Calls, the Department has set a performance benchmark of 95 percent for all companies. In 2004, the Company achieved 99.46 percent, which generated an offset for the Company. As shown in Appendix 8, the Company's historical data has been updated to include 2004 performance.

#### 2. <u>Lost-Work Time Accident Rate</u>

The SQ Plan requires the Company to report on the Incidence Rate of Lost Work Time Injuries and Illness per 200,000 Employee Hours, as defined by the U.S. Department of Labor Bureau of Labor Statistics. This data is compiled and reported annually to the U.S. Department of Labor Bureau of Labor Statistics and the Company has 10 years of available data for this measure. Based on that data, the performance benchmark for this measure is 8.62. In 2004, the number of Lost Work Time Accidents was 1.40, which generated an offset for the Company.<sup>5</sup>

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In applying the Department's penalty/offset formulae to the Company's performance data, the Company has determined that, in some instances, the maximum amount of offsets cannot be achieved. For example, the Company's 2004 SQ Report demonstrates that its benchmark for billing adjustments is set at 33.37. However, because of a wide deadband of 26.77, a maximum offset may result in 2006 for 2005 performance only if the Company's billing adjustments are calculated as (-20.18), which is impossible.

<sup>5</sup> On January 1, 2002, the U.S. Department of Labor, Occupational Safety and Health Administration ("OSHA"), revised the regulations concerning the recording and reporting requirements for occupational injuries and illnesses. See 29 CFR § 1904.7. Specifically, the revised regulations require the Company to include the number of calendar days that an employee was unable to work as a result of injury, regardless of whether or not the employee was scheduled to work on those days (29 CFR § 1904.7(iv)). The Company's performance benchmark for Lost-Work Time Accident Rate, which is based on ten years of historical information, excludes weekends, holidays or other days that an employee would not normally have reported to work. Since the effective date of OSHA's regulations, the Company has maintained a log of occupational injuries or illnesses consistent with the new regulation going forward. However, for purposes of the annual service-quality report (the "SO Report"), the Company has tracked and reported its performance consistent with the prior version of the regulation so that the performance data will match the historical data composing the performance benchmark. The Department approved the Company's 2002 SQ Report using this methodology. See 2002 Service Quality Reports for Electric Distribution and Local Gas Distribution Companies, D.T.E. 03-10 through D.T.E. 03-23 (2003).

#### Schedule 1 Page 1 of 2

#### NSTAR GAS COMPANY SERVICE QUALITY STANDARDS

	Required	Actual			Penalty /			Re	esults - 2004	
Magazza	Years	Years	Historical	Std Day	Offset	Max (4)	Observ	Variance	No. of	Penalty /
<u>Measures</u>	<u>History</u>	<u>Available</u>	Average(1)	Std Dev	<u>Weight</u>	<u>Penalty</u>	Observ.	variance	Std Devs	(Offset)
Customer Service and Billing										
% Calls Answered (2)	10	7	61.30%	20.84%	12.5% \$	357,753	77.66%	16.36%	0.7850	0
% Service Appointments Met	10	4	99.62%	0.12%	12.5%	357,753	99.72%	0.10%	0.8333	0
% On-Cycle Meter Reads	10	7	97.78%	1.55%	10.0%	286,202	97.71%	-0.07%	-0.0452	0
Safety and Reliability										
Lost Work Day Accidents	10	10	8.62	3.96	10.0%	286,202	1.40	-7.22	-1.8232	(237,838)
% Class I & II Odor Calls(6)	NA	NA	95.00%	NA	45.0%	1,287,909	99.46%	4.46%	4	(1,287,909)
Consumer Division Statistics										
Consumer Division Cases	10	10	0.955	0.219	5.0%	143,101	0.699	-0.256	-1.1689	(48,881)
Billing Adjustments	10	10	33.37	26.77	5.0%	143,101	38.27	4.90	0.1830	0
Total					100.0% \$	2.862.020			9	(1.574.628)

#### **Notes**

- (1) Reflects DTE measures, benchmark method and penalty/incentive mechanism.
- (2) Telephone statistic based on calls handled within 30 Seconds; includes abandoned calls.
- (3) Penalty begins at 1 sd from average and equals 25% of max penalty
- (4) Max penalty is incurred at 2 sd from average
- (5) Two percent of total T&D revenue in 2004
   \$2,862,520

   Less: Service Guarantee Payout
   500

   Maximum Penalty / (Offset)
   \$2,862,020

(6) Penalty/ (Offset) equal to 25% of max apply to each percentage point below/above 95% up to the max penalty.

Schedule 1 Form A & B 2004 Performance All Companies

#### **NSTAR GAS COMPANY**

																DTE 01-71 Hi	story	
					н	listory (1)												
Measures	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	1988	Sample	Average	Std Dev
Customer Service and Billing																		
% Calls Answered (1)	79.03%	79.08%	68.35%	81.49%	51.15%	30.90%	39.12%									7	61.30%	20.84%
% Service Appointments Met	99.76%	99.66%	99.57%	99.48%												4	99.62%	0.12%
% On-Cycle Meter Reads	97.12%	98.19%	98.97%	99.13%	98.50%	97.95%	94.60%									7	97.78%	1.55%
Safety and Reliability																		
Lost Work Day Accidents			1.22	3.32	6.10	9.43	10.00	9.38	9.97	11.37	14.41	11.01				10	8.62	3.96
Class I & II Odor Calls	99.39%	98.86%	99.28%	98.93%	98.38%	98.50%				F	ixed @ 95%	6 for duration	on of Servi	ce Quality I	Plan			
Consumer Division Statistics																		
Consumer Division Cases			0.743	0.761	1.183	1.239	0.857	0.576	1.115	1.125	0.918	1.034				10	0.955	0.219
Billing Adjustments			10.11	4.51	30.80	22.59	24.37	11.98	41.92	40.20	50.58	96.61				10	33.37	26.77

#### Notes

Schedule 1 Form A & B 2004 Performance All Companies 2/18/2005

<sup>(1) 12</sup> Month period January to December.

<sup>(2)</sup> Telephone statistic based on Calls Handled within 30 Seconds; includes abandoned calls.

# **Annual Service Quality Report SECTION THREE**

Year Ending December 31, 2004

Back-up Data and Supporting Schedules



#### **SECTION 3**

#### I. Non-Penalty Related Service Quality Information

Section VII of the SQ Plan sets forth a number of non-penalty related reporting requirements for the Company's annual service-quality filings. These reports are as follows:

#### **Appendix 1:** Customer Surveys

Pursuant to section III.C of the SQ Plan, NSTAR Gas conducted an annual survey of (1) overall customer satisfaction as indicated by a statistically representative sample of residential customers, and (2) post-transaction customer satisfaction as indicated by a sample of randomly selected customers who have contacted the Company's customerservice department during the year. The surveys were conducted by Research International, which is an independent research firm with significant experience in conducting customer satisfaction surveys. The results of these surveys are presented in Appendix 1.

#### **Appendix 2**: Restricted Work Day Rate

The Restricted Work Day Rate is the Incidence Rate of Restricted Work Cases Per 200,000 Employee Hours, as defined by the U.S. Department of Labor, Bureau of Labor Statistics. The Restricted Work Date Rate performance statistics for the ten most recent years ending December 31, 2004 is provided in Appendix 2.

#### **Appendix 3:** Unaccounted-For Gas

Pursuant to section VII.A of the SQ Plan, the Company is required to report its Unaccounted-For Gas on an annual basis. The information for the ten most recent years ending December 31, 2004 is provided in Appendix 3.

#### **Appendix 4:** Damage In Excess of \$5,000

Pursuant to section VII.A of the SQ Plan, the Company is required to provide information regarding damage in excess of \$5,000 that is reported to the Department's Pipeline Engineering and Safety Division. This information is provided in Appendix 4.

#### **Appendix 5:** Capital Expenditures

The Company's data on capital expenditures for the ten most recent years (1995 through 2004) is provided in Appendix 5.

#### **Appendix 6:** Spare Component and Acquisition Inventory Policy

Pursuant to section VII.F of the SQ Plan, NSTAR Gas is required to report on an annual basis its policy for identifying, acquiring, and stocking critical spare components for its distribution and transmission system. The Spare Component and Acquisition Inventory Policy is provided as Appendix 6.

#### **Appendix 7:** Staffing Levels

Staffing level information for the Company is provided in Appendix 7.

#### **Appendix 8:** Performance Benchmarks for 2004

In Appendix 8, the Company has updated historical data to include 2004 performance data in the calculation of benchmarks for the 2005 reporting period, where the benchmarks were not fixed for the duration of the SQ Plan.

#### II. Customer Service Guarantees

Pursuant to section XI of the SQ Plan, NSTAR Gas is required to provide information as to the customer payments credited as a result of the customer-service guarantee program during the service-measurement period. As indicated in the SQ Plan, NSTAR Gas credits the customer's account by \$25.00 if a meter reading is inaccurate, if the Company knowingly fails to inform a customer that it will be more than 30 minutes late for a service appointment, if there is an error in the direct payment or pay-by-phone billing systems, if the Company fails to inform a customer of a scheduled service interruption, or if the Company does not respond to a billing question by the next business day. In addition, if a new residential service line is not connected by the agreed date (after all permits are received), the first month's bill is free (minimum \$25, maximum \$100). In 2004, NSTAR Gas remitted to customers a total of \$500.00 under its Customer-Service Guarantee program.

#### III. Conclusion

As set forth above, this filing establishes the performance benchmarks for service-quality measures subject to the penalty mechanism based on historical data available through December 31, 2004. On March 1, 2006, NSTAR Gas will make its annual filing, which will compare the Company's performance in 2005 to the benchmarks established in this filing. The Company's March 2006 filing will also include documentation to satisfy all other reporting requirements set forth in the approved SQ Plan.

# **Customer Surveys**

Year Ending December 31, 2004



#### RESEARCH INTERNATIONAL



#### **MEMO**

TO NSTAR

FROM Research International

DATE February 4, 2005

RE: Residential customer satisfaction metrics (NSTAR Gas)

The following results are from a representative sample of 800 NSTAR residential customers. Of the 800 surveys, 550 were with NSTAR Electric residential customers (300 in the former Boston Edison service area, and 250 in the former COM/Electric service area) and 250 with NSTAR Gas residential customers.

Respondents were asked to evaluate their satisfaction with the service they are receiving from NSTAR Gas using a 7-point scale, where a rating of "7" means "very satisfied." "Don't know" responses are excluded from the analysis.

 Nine in ten (91.4%), or 224 of 245 NSTAR Gas customers rate positively their overall satisfaction with NSTAR (5 or higher on 7-point scale).

The raw numbers in terms of actual customer responses to the 7-point scale in 2004 are as follows:

Response codes	"1"	"2"	"3"	"4"	"5"	"6"	"7"	"DK"
Responses	2	2	3	14	48	53	123	5

The associated margin of error for the sample of 250 surveys is +/-6.2 percentage points at the midpoint of the 95% confidence level.

Mary I. Burns Client Services Director Research International/Stamford 203-358-0900 3 Landmark Square Stamford, CT 06901

#### RESEARCH INTERNATIONAL



#### **MEMO**

TO NSTAR

FROM Research International

DATE February 4, 2005

RE: Post-transaction residential customer satisfaction metrics (NSTAR Gas)

The following results are from a representative sample of 900 NSTAR residential customers who recently contacted NSTAR for service. Of the 900 surveys, 720 were with NSTAR Electric residential customers (457 in the former Boston Edison service area, and 263 in the former COM/Electric service area) and 180 with NSTAR Gas residential customers.

Respondents were asked to think about the most recent time they called NSTAR and to evaluate their overall satisfaction with the service they received from the customer service department of NSTAR using a 7-point scale, where a rating of "7" means "very satisfied." "Don't know" responses are excluded from the analysis.

• Nine in ten (91.0%), or 161 of 177 NSTAR Gas customers rate positively their overall satisfaction with NSTAR's customer service (5 or higher on 7-point scale).

The raw numbers in terms of actual customer responses to the 7-point scale in 2004 are as follows:

Response codes	"1"	"2"	"3"	"4"	"5"	"6"	"7"	"DK"
Responses	5	2	3	6	24	30	107	3

The associated margin of error for the overall sample of 180 surveys is +/-7.3 percentage points at the midpoint of the 95% confidence level.

Mary I. Burns Client Services Director Research International/Stamford 203-358-0900 3 Landmark Square Stamford, CT 06901

# **Restricted Work Day Data**

Year Ending December 31, 2004



# **Injury Statistics**

### **Restricted Duty Cases**

NSTAR Gas Company

	Hrs. Wkd.	# of Cases	Rate
4005	4 202 002	<b>-</b>	0.70
1995	1,323,602	5	0.76
1996	938,578	6	1.28
1997	1,119,625	8	1.43
1998	1,123,666	10	1.78
1999	1,114,857	16	2.87
2000	1,143,214	31	5.42
2001	1,145,547	37	6.46
2002	1,060,759	25	4.65
2003	1,003,262	30	6.06
2004	964,343	17	3.53
		Mean	3.42

Incident Rate = Number of Cases x 200,000/Hours Worked

## **Unaccounted-For Gas**

Year Ending December 31, 2004



	nted for Gas Gas Company
1995	3.25%
1996	3.25%
1997	2.59%
1998	3.71%
1999	4.54%
2000	1.78%
2001	4.76%
2002	1.53%
2003	2.13%
2004 **	2.94%

<sup>\*\*</sup> Subject to change pending finalization of the Return of the NSTAR Gas Company to the DTE of Massachusetts for the Year ended December 31, 2004.

Note 1: The unaccounted for gas for NSTAR Gas is the net result of reconciling the total gas send out to gas sold plus company use. The source of the calculation is page 72 of the Return of the NSTAR Gas Company to the DTE of Massachusetts.

Damage in Excess of \$5,000

Year Ending December 31, 2004



Damage in Excess of \$5,000 that is reported to the Department's Pipeline Engineering and Safety Division.

• None

# **Capital Expenditures**

Year Ending December 31, 2004



<u>District</u>	Auth	Area	Description	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
			·				<del></del> -						
Distribution:		A.II. A	M: N B:		0 00-								
All Areas		All Areas	Mains - New Business	\$ 1,155									2,100
All Areas		All Areas	Mains - System Improvements/Replacements	1,604	915	2,031	1,750	1,945	1,260	1,457	2,450	2,038	2,390
All Areas All Areas		All Areas All Areas	Mains - Cast Iron Replacement Services - New Business	881 4,212	189 4,061	1,276 4,804	973 4,653	1,206 4,681	1,119 3,193	1,352 2,543	1,994 2,931	2,374 2,988	1,420 3,065
All Areas		All Areas	Services - Replacement	3,915	3,402	4,604	3,754	3,671	2,482	2,543	2,931	3,029	3,067
All Areas		All Areas	Corrosion - Rectifiers	3,915	3,402	4,407	3,754		2,402	2,907	2,010	3,029	3,067
All Areas		All Areas	Tools - Work Equipment	122	76	154	163	107	71	-	254	174	79
All Aleas		All Aleas	Tools - Work Equipment	122	70	104	103	107	/ 1	-	204	174	79
Dedham		Hyde Park	Master Meter Project - Georgetown, Hyde Park	-	_	31	226	_	_	_			
Deanam		riyac r an	Musici Meter i Toject Ceorgetown, Tryde i dik			01							
			Providence Rd, Northbridge - Bridge Const Main	_	_	_	_	134	_	_	_		
			Treviacios ra, rierabilago Bilago conoc. Illani										
New Mains and	Services:												
	04813	Plymouth	Colony Place - Plymouth										72
	04812	Hopkinton	Deerfield Estates - Hopkinton										147
	03809	Hopkinton	Estates at Highland Ridge - Hopkinton										21
	03824	Sutton	Forest Edge - Sutton										78
	04822	Grafton	Hillview Estates										66
	04805	Rochester	Mattapoisett Bay Club / Rochester Estates										493
			Minor Projects	-	34	203	-	375	-	-	-		
	04807	Holden	Newell Rd - Holden										112
Southboro			Prentiss Forest	-	-	129	270	-	-	-	-		
Southboro		Ashland	Prospect/Main St, Ashland	-	-	-	-	156	-	-	-		
	04819	Fairhaven	Shannon Meadows - Fairhaven										22
	02830	Northbridge	Shining Rock - Northbridge										24
Southboro		Framingham	Stapleton School, Framingham	-	-	-	-	293	-	-	-		
	04806	Plymouth	Summer St / South Street Connector, Plymouth										204
Southboro		Milford	Village, Milford	-	-	-	-	88	-	-	-		
Southboro		Framingham	Villages @ Farm Pond, Framingham	-	-	-	-	75	-	-	-		
System Improve													
	00826	Hopkinton	176 South St, Hopkinton	-	-	-	-	-	76	27	20		
	00801		200 Camb Pk Dr #5 -Genetics	-	-	-	-	-	255	98	3		
		Plymouth	226 Nicks Rock Rd - Plymouth	1	-	-	-	-	-	-	-		
	01838	Cambridge	770-790 Memorial Dr, Cambridge	-	-	-	-	-	0	106	8		
		Cambridge	80 Gerry Landing Rd., Cambridge	-	-	-	160	-	-	-	-		
	03822	Grafton	Adams Crossing	-	-	-	-	-	-	-	-	136	
	03825	Northboro	Algonquin High, Northboro	-	-	-	-	-	-	-	-	104	8
	00821	Worcester	Angela Rose (Franklin St#3) Worcester	-	-	-	-	-	5		0		
	00821	Worcester	Angela Rose Gardens, Worcester	-	-	-	-	-	-	21	12		
New Bedford		New Bedford	Arnold Street #1, New Bedford	-	-	-	-	228	-	-			
	01839	Westboro	Avalon @ Flanders, Westboro	-	-	-		-	0		117		
	01835	Marlboro	Avalon Orchards, Marlboro	-	-	-		-	0		15		
	01834	Worcester	Beacon St, Worcester	-	-	-	-	-	-	71	4		
100	02817	Worcester	Beacon St, Worcester	-	-	-	-	-	0	-	178	1	
Worcester		Worcester	Belmont st #1 - Worcester	32	-	-	-	-	-	-	-		
Southboro	99430	Marlboro	Bigelow St - Marlboro	148	-	-	-	-	57	-	-		
Cambridge	99430	Cambridge	Buckingham Street Combridge	-	-	-	-	- 86	5/	-	-		
Cambridge	02814	Cambridge	Buckingham Street, Cambridge	-	-	-		00	-	-	<u> </u>	163	10
+ +	99428	Worcester	Burncoat Ave	-			-	-	24	-		163	19
Combridge	99428	Cambridge	Cambridge St, IP, Cambridge	-	-	-	693	409	24	-			
Cambridge Cambridge		Cambridge Cambridge	Cambridge St. IP, Cambridge	-	-	82	693	409		-			
Carribriuge	03807	Freetown	Cambridge St., Cambridge Campanelli NBM	-	-	62	-	-	-	-	-	28	50
Southboro	03807	Shrewsbury	Campanelli NBM  Centech Park- South St Shrewsbury	-	_		-	-	-	-	67	28	50
Southbold	02805	Needham	Central Ave 2, Needham	-		-	-	-	<del>                                     </del>	50	07	22	
Dedham	01010	Needham	Central Ave I, Needham	-		107	-	-	<del>                                     </del>	- 50	-		
Deullaili	00823	Needham	Central Ave, Needham	-		107	-	-	156	14	-		
Dedham	02802	Needham	Central Ave, Needham  Central Ave, Needham	-	-	-	-	-	150	- 14	155	230	
Dodinani	02002	1 TOCUITATII	Contrai Ave, Neceriani		_	_	-		-	16	133	230	

District	Auth	Area	Description	<u>1995</u>	<u>1996</u>	<u>1997</u>	1998	<u>1999</u>	2000	<u>2001</u>	2002	2003	2004
	00810	Cambridge	Chilton St, Cambridge	-	-	-	-	-	3		-		
	01809	Worcester	Coburn Ave, Worcester	-	-	-	-	-	-	212	52		
	02807	Worcester	Colburn Ave, Worcester	-	-	-	-	-	-	-	336		
	00812	Holliston	Connelly Hill Est, Holliston	-	-	-	-	-	22	-	-		22
		Hopkinton	Connelly Hill Est., Hopkinton	-	-	-	-	-	0	27	23		
	01837	Ashland	Cookigham Greene, Ashland	-	-	-	-	-	0	31	113	4	4
	99445	Plymouth	Court St. Rt3A1, Plymouth	-	-	-	-	-	18	4	-		
New Bedford			Court Street	-	80	-	1	-	-	-	-		
Plymouth		Plymouth	Court Street RT3A1, Plymouth	-	-	-	-	603	-	-	-		
New Bedford		New Bedford	Crapo St - New Bedford	145	-	-	_	-	-	-	_		
Worcester			Cross Town Feeder 5	-	-	-	889	-	-	-	-		
	99420	Worcester	Cross Town Feeder, Worcester	-	_	-	-	-	11	-	_		
	01841	Marlboro	Elm St, Marlboro	_	_	_	_	_	-	31	_		
	99473	Uxbridge	Elmshade Estates, Uxbridge	-	_	_	_	_	16	2	_		
Southboro	00833	Marlboro	Farm St., Marlboro	-		_	_	-	54	58	(7)		
Southboro	00033	IVIAIIDOIO	Fay Farm Estates	20		-	-	-	34	-	-		
Southbolo	99471	Ashland	Fiske Hill Est, Ashland	-		-	-	-	3	3	-		
						-	-	-			-		
	00801	Marlboro	Forest St, Marlboro	-		-	-		-	35	0		
	00831	Marlboro	Forest St, Marlboro	-	-	-	-	-	0	3	-		
	00825	Framingham	Framingham Schools	-	-	-	-	-	130	102	0		
Cambridge		Cambridge	Fresh Pond Parkway 1, Cambridge	-	-	-	-	148	-	-	-		
	99431	Cambridge	Fresh Pond Pkwy, Cambridge	-	-	-	-	-	479	2	-		
Worcester		Worcester	Fruit St. Worcester	-	-	-	136	-	-	-	-		
	00818	Worcester	Gates St, Bridge, Worcester	-	-	-	-	-	-	27	(26)	(29)	
	99437	Hyde Park	Georgetown, Hyde Park	-	-	-	-	-	(74)	(77)	-		
Dedham		Hyde Park	Georgetown, Hyde Park	-	-	-	-	148	-	-	-		
	03816	Worcester	Good Harbor, Worcester	-			-	-	-	-	-	40	3
	00802	Shrewsbury	Grafton St/Gold St, Shrewsbury	-	-	-	-	-	151	-	-		
	01801	Shrewsbury	Grafton/Puritan Phase 1	-	-	-	_	-	-	31	11		0
	02831		Grafton/Upton NBM	_			_	_	_	-	-	630	137
	01805	Worcester	Granby Rd/Shrew St, Worcester	_	-	-	_	_	-	271	0	555	
	00804	Natick	Grove St/Walnut St, Natick	-	_	_	_	-	149	4	-		
	00824	Shrewsbury	Hartford Turnpike Shrewsbury	-	_	_	_	_	70	13	_		
	00829	Dartmouth	Hawthorne St, Dartmouth	-		_	_	_	-	289	-		
	99464	Hopkinton	Hearthstone, Hopkinton	-		-	-	-	1	1	-		
	01836			-		-	-	-	0	21	12		
		Marlboro	Hemenway St #370, Marlboro	-		-	-	-	-				
	99423	Worcester	Hidden Farms, Worcester	-	-	-	-	-	3	6	0	40	100
	99482	Holliston	Highland Ph2, Holliston	-	-	-	-	-	90	26	2	10	126
Southboro		Milford	Highland St. Milford	-	-	-	253	-	-	-	-		
	99489	Holliston	Highland, Hol Ph2, Holliston	-	-	-	-	-	-	26	-		
	01817	Marlboro	Hildrith St #1, Marlboro	-	-	-	-	-	-	36	178		
	99451	Shrewsbury	Hills Farm Est Ph8, Shrewsbury	-	-	-	-	-	2	-	-		
Southboro		Shrewsbury	Hill's Farm Estates, Shrewsbury	30	-	-	-	-	-	-	-		
	00828	Hopkinton	Hopkinton Meadows, Hopkinton	-	-	-	-	-	-	54	(6)		
Southboro		Westboro	Hopkinton Rd., Westboro	-	-	90	118	-	-	-	-		
	99474	Ashland	Howard Estates, Ashland	-	-	-	-	-	8	-	-		
	01804	Millbury	Howe Ave, Millbury	-	-	-	-	-	-	168	-		
Worcester	02811	Worcester	Hurley Sq Rte 146	-	-	-	-	-	-	-	20	1	9
Dedham	-	Hyde Park	Hyde Park Ave., Hyde Park	-	-	-	575	-	-	-	-		
Dedham	02806	Hyde Park	Hyde Park, Cambridge	-	_	-	-	_	_	-	115	45	278
	00816	Worcester	Indian Hills, Worcester	-	_	_	-	-	55	4	. 10		270
Southboro		Sherborne	Kendall Ave - Sherborn	67	-	_	-	-	-		_		
	01806	Worcester	King St., Worcester	-		_	_	_	-	73	1		
	99483	Shrewsbury	Lake St. Shrewsbury	-		-	-	-	8	7.5	-		
Southbore	99 <del>4</del> 03	Shrewsbury	Lake Street System, Shrewsbury	-		-	-	101	۰	-	-	+	
Southboro	00811	Cambridge	Larch St. Cambridge	-		-	-	-	5		-	-	
Moroostor	00011	Санилиде		15		-	-	-	5	-	-	+	
Worcester	00400	Combrid	Lincoln Sq Boy's Club			-	-		450	-	-	+	
	99432	Cambridge	Line St, Cambridge	-	-	-	-	-	158	2	-		
	01823	Cambridge	Magazine/Chestnut, Cambridge	-	-	-	-	-	0	1	-		
	01821	Cambridge	Magazine/Fairmont, Cambridge	-	-	-	-	-	0		1		
	01822	Cambridge	Magazine/Green Sts, Cambridge	-	-	-	-	-	-	32	81	98	
Southboro		Boylston	Main St - Boylston	25	-	-	-	-	-	-	-		

<u>District</u>	<u>Auth</u>	Area Hudoop	Description Main St. Hudgen	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
Southboro		Hudson	Main St - Hudson	191	-	- 440	-	-	-	-	-		
Plymouth		Kingston	Main St. I, Kingston	-	-	116	-	-	-	934	-		
	04045	Ohannahaan	Mains-Replacement (Paving Accl)	-	-	-	-	-	-	934	- 404	00	
	01815	Shrewsbury	Maple Ave, Shrewsbury	-	-	-	-	-	-	-	104	80	
	02816 00805	Shrewsbury	Maple Ave, Shrewsbury	-	-	-	-	-	158	-	209	5	
I a D a alfa a al	00805	W. Boylston	Maple St, West Boylston	329	-	-	-	-		-	-		
lew Bedford	00000	Mattapoisett	Marion Rd - Mattapoisett		-	-	-	-	-	-	- (40)		
	00832		Meadow Brk Village, Berlin	-	-	-	-	-	-	55	(12)		
	99481	Framingham	Mellen St, Framingham	-	-	-	-	-	18	2	0		
	99418	Framingham	Mellen St., Framingham	-	-	-	-	-	-	-	(17)		
	01813	Dedham	Mill Lane, Dedham	-	-	-	59	262	-	21	34		15
			Minor Projects	-	- 76	178		78	-	-	-		15
			Minor Projects	-			-		-	-	-		
			Minor Projects	-	145	21	-	61	-	-	-		
			Minor Projects	-	2	63	-	51	-	-	1		
			Minor Projects	-	-	63	65	-	- 400	(0.47)			
			Minor Projects	-	-	-	-	-	122	(947)	-		
edham		Hyde Park	Neponset Valley Pky, Hyde Park	-	-	160	-	-	-	-	-		
lymouth	0	147	Newfield Street Loop	-	99	-	-	-	-	-	-		
	04820	Worcester	North Lake Avenue - Worcester										136
	00803	Shrewsbury	Oak St, Shrewsbury	-	-	-	-	-	2	-	(4)		
	99435	Dedham	Oak/Maple/Pine, Dedham	-	-	-	-	-	0	1	-		
	99478	Grafton	Oakmont Farms Phase 2, Grafton	-	-	-	-	-	124	13	-		
	01814	Grafton	Oakmont Farms, Phase 3, Grafton	-	-	-	-	-	0	106	10		
	02835	New Bedford	Off Philips Rd New Bedford	-			-	-	-	-	35	26	1
	99487	Ashland	Orchard Hill Est 2, Ashland	-	-	-	-	-	123	26	-		
	99475	Ashland	Oregon Heights, Ashland	-	-	-	-	-	2	54	-		
	00815	Westboro	Overlook Dr, Westboro	-	-	-	-	-	3	61	2		
	00820	New Bedford	Park St #3, New Bedford	-	-	-	-	-	100	1	-		
	99490	Hudson	Pheasant Trail, Hudson	-	-	-	-	-	36	12	-		
outhboro	00400	Westboro	Picadilly Mill - Westboro	55	-	-	-	-	-	-	1		
	99462	Southboro	Pine Hill Rd Phase 1&2,Southboro	-	-	-	-	-	2	-	-		
	00830	Plymouth	Pine Hills Ph 1, Plymouth	-			-	-		-	-	44	
	00835	Plymouth	Pine Hills Ph 1, Plymouth	-	-	-	-	-	55	0	0	76	
	00835	Plymouth	Pine Hills Ph3A, Plymouth	-	-	-	-	-	-	195	0		
	00835	Plymouth	Pine Hills,Plymouth	-	-	-	-	-	0	33	145		
	00836	Plymouth	Pine Hills-Ph2 8" ip pl, Plymouth	-	-	-	-	-	66	36	0		
Southboro	00000	0	Pleasant Street	-	76	73	-	-	-	-	- 407	63	7
orcester	02808	Sutton	Pleasant Valley, Sutton	- 440	-	-	-	-	-	-	167	63	/
uthboro	99485	Natick	Pond St - Natick	146	-	-	-	-	- 88	-	-		
		Framingham	Potter School, Framingham			-	-			4			
	99468	Shrewsbury	Prospect Hill Ph2, Shrewsbury	-	-	-	-	-	2	- 47	-		
	99484	Shrewsbury	Prospect Hills Phase 3, Shrewsbury	-	-	-	-	-	26	17	-		
	00834	Marlboro	Prospect St, Marl (Southboro District)	-	-	-	-	-	-	73	-		
	99454	Shrewsbury	Rawson Hills 3 Svc, Shrewsbury	-	-	-	-	-	0	2	-		
	00819	Cambridge	Rindge Ave, Cambridge	-	-	-	-	-	184	36	-		
	01819	Hyde Park	River St #1, Hyde Park	- 470	-	-	-	-	-	278	3		
	00:00	New Bedford	Rivet & Orchard St - New Bedford	170	-	-	-	-	-	-	-		
	99438	Needham	Rosemary & Hillside, Needham	-	-	-	-	-	159	-	-		
edham	00110	Needham	Rosemary & Hillside, Needham	-	-	-	-	244	-	-	-		
	99418	Millbury	Rt 146 (Johnson St), Millbury	-	-	-	-	-	1	-	-		
	99425	Millbury	Rt 146/122A, Millbury	-	-	-	-	-	229	-	-		
	99425	Millbury	Rt 146/122A, Millbury	-	-	-	-	-	-	256	6		
		Millbury	Rt 146/Johnson St, Millbury	-	-	-	-	-	-	2	-		
Vorcester		Millbury	Rte 146 (Johnson St.), Millbury	- 04	-	88	73	-	-	-	-		
outhboro		Westboro	Ruggles St II - Westboro	81	-	-	-	-	-	-	-		
	80800	Carver	S. Meadow & Main St, Carver	-	-	-	-	-	73	92	-		
	03811	Worcester	Salisbury Hill, Worcester	-			-	-	-	-	-	19	14
Plymouth		Plymouth	Samoset St - Plymouth	2	-	-	-	-	-	-	-		
	04808		Scanner Hardware										12
	04826 02815	Fairhaven	Sconticut Neck Road - Fairhaven									28	64
			Shoppes @ Blackstone	1			_	- 1	-	-	-	28	5

District	Auth	Aroa	Description	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
District	00806	Area Worcester	Shrewsbury St, Worcester	1333	1550	1551	1330	1333	<u>2000</u> 295	65	2002	2003	2004
New Bedford	00000	New Bedford	South Rodney French Blvd	-	70	-	-		293	-			
ivew Bedioid	00822	Hopkinton	South Nothey French Biva	-	70	-	-		69	31			
Southboro	02802	Shrewsbury	South St., Shrewsbury	-	-	-	-	-	-	-	89		
Worcester	02002	Worcester	Southbridge St. Relay - Worcester	-	-	-	177	-	-	-	09		
Cambridge	00801	Cambridge	Sparks St, Cambridge	-	-	-	177	-	0	-	80		
Cambridge	00801	Cambridge	Sparks St, Cambridge  Sparks St, Cambridge	-	-	-	-	-	0	65			
	04811			-	-	-	-	-	U	00			86
	99444	Cambridge	Sparks St (Huron to Brattle), Cambridge						0				00
	99444	Plymouth	Spooner St, Plymouth	-	-	-	- 445	-	2	-	-		
Plymouth	00000	Plymouth	Spooner St., Plymouth	-	-	-	145	-	-	-	-	100	
	03806	Freetown	Stop & Shop Freetown	-			-	-	-	-	-	128	2
Worcester			Stores St	15	-	-	-	-	-	-	-		
Southboro		Northboro	Tall Pines, Northboro	-	-	100	-	-	-	-			
	01824	New Bedford	Tarklin Hill Rd, New Bedford	-	-	-	-	-	-	73	2		
	01811	Worcester	Tatman St, Worcester	-	-	-	-	-	-	84	-		
	00834	Northbridge	The Hills, Northbridge (Southboro District)	-	-	-	-	-	5	44	37		
Southboro		Natick	The Sanctuary #2, Natick	-	-	98	70	-	-	-	-		
	01810	Holden	The Seasons Phase 1, Holden	-	-	-	-	-	-	16	6		3
New Bedford		New Bedford	Union St. #2, New Bedford	-	-	83	163	-	-	-	-		
	01807	New Bedford	Union St/CI New Bedford	-	-	-	-		-	42	-		
Cambridge		Cambridge	Vassar St - Cambridge	9	-	-	-	-	-	-	-		
	02834	Cambridge	Vassar St, Cambridge	-			-	-	-	-	-	110	25
Cambridge	02809	Somerville	Vassar St., Cambridge	-	-	-	-	-	0	-	60		
	03810	Ashland	Village of the Americas	-			-	-	-	-	-	28	33
	99477	Milford	Village Silverhill, Milford	-	_	-	-	_	11	8	_		
Southboro	01843	Hudson	Villages at Hudson	-	_	_	-	_	-	0	194	23	84
	01843	Southboro	Villages at Hudson	-	_	_	_	_	0	-	4		
Southboro	01010	Shrewsbury	Walnut Ridge Estates - Shrewsbury	1	_	_		_	-	_	-		
Worcester		Worcester	Washington Heights #3 - Worcester	111	-	_	_		-	-			
Worcester	99479	Hudson	Washington St, #1 Hudson		-	-	-		6	-			
	01818	Natick	Washington St, #1 Hudson Washington St, Natick	-	-	-	-		-	60	17		
	04810	Holliston	Washington St Holliston	-	-	-	-	-	-	00	17		341
Cauthhara	04610							118					341
Southboro		Hudson	Washington Street #1, Hudson	-	-	-	-		-	-			
Southboro	01011	Holliston	Washington Street, Holliston	-	-	-	-	152			- 10		
	01841	Marlboro	Waterford Dr, Marlboro	-	-	-	-	-	0	32	16		1
	00814	Framingham	Waverly St, Framingham	-	-	-	-	-	234	252	2		
	01828	Framingham	Waverly St, Framingham	-	-	-	-	-	-	247	23	1	
Worcester	03813	Worcester	West Boylston St - Regulator	-			-	-	-	-	-	22	
	02833	Worcester	West Boylston St. Worcester	-			-	-	-	-	-	(7)	
Worcester		Worcester	West St Regulator - Worcester	4	-	-	-	-	-	-	-		
	04809	Marlboro	West Main St - Marlboro										161
Plymouth		Plymouth	Westerly Rd & Summer - Plymouth	3	-	-	-	-	-	-	-		
Worcester		Worcester	Western Leg Beltline - Worcester	57	-	-	-	-	-	-	-		
Worcester		Worcester	Western Leg Beltline, Worcester	-	-	421	46	-	-	-	-		
	01802	Marlboro	Wheeler Rd, Marlboro	-	-	-	-	-	-	43	66		-
	01844	Sutton	Whitin Rd 1, Sutton	-	-	-	-	-	-	5	10	1	
	00813	Worcester	Windsor St, Worcester	-	-	-	-	-	116	2	-		
	99424	Worcester	Winter Heights, Worcester	-	-	-	-	-	16	-	-		
	99424	Worcester	Winter Heights, Worcester	-	-	-	-	-	-	115	0		
	99419	Worcester	Winter Hill, Holden-Worcester	-	-	-	-	-	4	_	-		
	99419	Worcester	Winter Hill, Holden-Worcester	_	-	-	-	_	-	13	-3		
New Bedford		New Bedford	Wood St., New Bedford	-	_	_	277	_	_	-			
Tron Beatera	01826	New Bedford	Wood/Slocom Sts, New Bedford	-	-	_		_	-	53	110		
	99465	Westboro	Woodland Preserve, Westboro	-	-	-		-	46	21			
	99486	Natick	Woodland Village, Natick	-	-	-	-		16	7	4		
	04803	Worcester	Worcester Beltway - Worcester	-	-	-	-		10	- /	4		365
	03817	VVOICESIEI	Framingham Take Station	_	-	-	_	_	_	-		175	637
		Dlymouth		-	-	-	-	-	-	3,468	16		037
	00836	Plymouth	Pine Hills - 12" steel main, Ply										
<del>                                      </del>	01803	Plymouth	Pine Hills Bourne Rd-Take Station	-	-	-	-	-	-	802	33		
	02804		Marlboro Take Station	-	-	-	-	-	-	-	1,201	14	1.0
	02810		Needham Take Station land acq	-	-	-	-	-	-	-	563	(413)	16
	02801		Hopk/Asland transfer line	-	-	-	-	-	-	-	226	3	

District	Auth	Area		Description		1995	199	ŝ	1997		1998	1	1999	2000	)	2001		2002	2003		2004
						-		-		-	-	_	-		-						
						-		-		-	_		-		-					74	(
				•																	,
				Paving		-		-		-	-		-		-			887	2.3	67	2,17
						-		-		-	-		-		-			-			2
				Corrosion Rectifiers		-		-		-	-		-		-	1	14	-		70	
				Gas Supply		-		-		-	-		-		-			777	3	22	58
				Technical Support		-		-		-	-		-		690	3,0	63	2,475	3,7	05	4,17
				Construction Accounting Services		-		-		-	-		-		152		-	-			
					_																
				Total Distribution	\$	13,547	\$ 10	),217	\$ 16, <sup>-</sup>	169	\$ 17,198	\$	17,114	\$ 14	,789	\$ 21,6	86 \$	23,522	\$ 21,3	58 \$	22,98
tion - Operations	3:																				
				Meter Purchases		1,000		256	;	370	665	\$	932	\$	635	\$ 7	18 \$	1,426	\$ 2,5	46	3,22
				Automated Meter Reading		-		-		65	429		-		-		-	-			
				-																	
				Total Distribution - Customer Care	\$	1,000	\$	256	\$ 4	135	\$ 1,094	\$	932	\$	635	\$ 7	18 \$	1,426	\$ 2,5	46 \$	3,22
ed Overheads:					\$	-	\$	-	\$	-	\$ -	\$	-	\$ 2	,818,	\$ 3,4	52 \$	4,572	\$ 3,8	22 \$	4,23
				Total Capital Spending *	\$	14,547	\$ 10	),473	\$ 16,0	304	\$ 18,292	\$	18,046	\$ 18	,242	\$ 25,8	56 \$	29,520	\$ 27,7	26 \$	30,44
Total Capital Sp	ending for y	ears 1994 t	hrough 1	999 include both Direct Charges and Indirect C	Charges	by project.															
		\$																			
		\$																			
		\$																			
		\$																			
1999		\$	5,585															·			
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ti	Total Capital Sp  1994 1995 1996 1997 1998	ion - Operations:	02821 02821 02821 ion - Operations: ed Overheads: Total Capital Spending for years 1994 t 1994 1995 \$ 1996 \$ 1997 \$	02821 02821 02821 ion - Operations: ed Overheads: Total Capital Spending for years 1994 through 1: 1994 \$ 5,073 1995 \$ 4,876 1996 \$ 3,767 1997 \$ 5,899 1998 \$ 5,520	02821 Ponds of Plymouth - Purchase 02821 Ponds of Plymouth - Infrastructure  Paving Leased Equipment Corrosion Rectifiers Gas Supply Technical Support Construction Accounting Services  Total Distribution  Total Distribution  Meter Purchases Automated Meter Reading  Total Distribution - Customer Care  ed Overheads:  Total Capital Spending for years 1994 through 1999 include both Direct Charges and Indirect Capital Spending \$ \$ 5,073 \$ 1995 \$ 4,876 \$ 1996 \$ 3,767 \$ 1997 \$ 5,899 \$ 1998 \$ 5,520	Ponds of Plymouth - Purchase	O2821	O2821	O2821	O2821	Donds of Plymouth - Purchase   -   -   -   -	O2821	O2821	Ponds of Plymouth - Purchase	O2821	O2821	O2821	O2821	Distribution   Ponds of Pymouth - Purchase   -   -   -   -   -   -   -   -   -	Deciding   Ponds of Plymouth - Purchase	Ozasz1

# Spare Component Acquisition & Inventory Policy and Practice

Year Ending December 31, 2004



#### **NSTAR Gas Company Spare Parts Policy and Practices**

NSTAR Gas Company ("NSTAR Gas" or the "Company") monitors and manages critical items for its gas distribution system using a state—of-the—art computerized and integrated work management and inventory-control/procurement system. This system was installed in 1999-2000, and provides for identification of common items needed for NSTAR Gas, as well as the operating systems of all of the NSTAR Companies (i.e., NSTAR Gas, Commonwealth Electric Company, Boston Edison Company and Cambridge Electric Light Company) (together the "NSTAR Companies"). Spare part requirements are periodically reviewed and updated by the Company to create efficiencies among and between the NSTAR Companies.

#### I. Gas and Electric Distribution System Spare Parts

The components of the NSTAR Gas distribution system are, for the most part, lower-cost and high-use items. Inventory levels are based on predicted numbers of: (1) replacements due to failure; (2) replacements due to wear, tear and obsolescence; and (3) new construction needs. Higher-cost, less-frequent turnover items, such as pad-mount switches, transformers, tapping and stopping equipment and regulators, are inventoried based on the same requirements.

In recent years, The NSTAR Companies have formed alliances with vendors of high-use items such as gas parts, distribution transformers, cable and overhead hardware. These alliances have proven very effective in assuring a continuous flow of high-quality components at a controlled price, as well as giving the NSTAR Companies priority treatment for emergency deliveries to cover natural disasters, which have the potential to drastically impact the system.

# II. Electric Transmission and Distribution Substation & Gas Take Station Spare Parts

Components at the substation level are much higher in cost, but much lower in number. The turnover of these components and the parts associated with them is also very low. Historically, there was a substantial inventory of substation spare parts, with very high carrying costs. Based on alternative methods for obtaining replacement parts, spare parts inventories were reviewed by NSTAR Gas, and as a result, substantially reduced.

NSTAR Gas has identified the following alternatives to maintaining a substantial inventory of spare parts:

- Establishing relationships with suppliers who maintain inventories of spare parts that can be obtained by NSTAR Gas on very short notice, as described above.
- o Utilizing equipment on the NSTAR Gas system, which has been recently replaced or upgraded, for use as spare parts. Because of the large number of

NSTAR Gas ongoing projects, this option would provide a fairly continuous supply of spare parts.

- o Maintaining relationships with utilities that utilize similar equipment.
- o Employing the use of rebuilding kits.
- o Promoting redundancy in design and parallel feeds throughout the NSTAR Gas system to reduce the need for major component inventories.

For large critical components, dedicated spares are kept and replaced as used by NSTAR Gas.

# **Staffing Levels**

Year Ending December 31, 2004



1997	THE	30	IGH	2004

**STAFFING** 

Commonwealth Gas Compa	1997 any	1998	1999	2000	2001	2002	2003	2004
Union	392	412	401					
Management	172	200	176					
NSTAR Electric & Gas								
Union				2,264	2,272	2,324	2,232	2,128
Management				919	914	889	855	847

Note 1: From 1998 to 1999 and 1999 to 2000 the Company offered a voluntary separation program offered as part of the merger with Commonwealth Energy System. During the period from August 1999 through August 2000, 635 employees from the Boston Edison and Commonwealth Energy System elected to participate in this program and exited the merged company. This was a program that was negotiated with the union leadership. Under the program, approximately 300 union and 335 management employees terminated their employment.

Note 2: With the merger of BEC Energy and Commonwealth Energy System into NSTAR Electric and Gas and resulting consolidation of operations, employees are no longer catagorized by or assigned to positions on the basis of the pre-merger operating company designations.

# NSTAR Gas Company 2005 Performance Benchmarks



NSTAR Gas Company 2005 Performance Benchmarks

	Percent	Percent	Percent	Lost	Class I&II	Consumer	
	Calls	Service	On-Cycle	Work Day	Odor	Division	Billing
<u>Year</u>	<u>Answered</u>	Appt. Met	Meter Reads	<u>Accidents</u>	<u>Calls</u>	<u>Cases</u>	<u>Adjustments</u>
	(1)				(2)		
1992				11.01		1.034	96.61
1993				14.41		0.918	50.58
1994				11.37		1.125	40.20
1995				9.97		1.115	41.92
1996				9.38		0.576	11.98
1997	39.12%		94.60%	10.00		0.857	24.37
1998	30.90%		97.95%	9.43	98.50%	1.239	22.59
1999	51.15%		98.50%	6.10	98.38%	1.183	30.80
2000	81.49%	99.48%	99.13%	3.32	98.93%	0.761	4.51
2001	68.35%	99.57%	98.97%	1.22	99.28%	0.743	10.11
2002	79.08%	99.66%	98.19%		98.86%		
2003	79.03%	99.76%	96.92%		99.39%		
2004	77.66%	99.72%	97.71%		99.46%		
Mean	63.35%	99.64%	97.75%	8.62	95.00%	0.955	33.37
Std. Dev.	20.15%	0.11%	1.45%	3.96	na	0.219	26.77
Max. Penalty	23.06%	99.41%	94.84%	16.54	91.00%	1.393	86.91
25% Penalty	43.20%	99.52%	96.29%	12.58	94.00%	1.174	60.14
25% Offset	83.49%	99.75%	99.20%	4.66	96.00%	0.736	6.60
Max. Offset	103.64%	99.87%	100.65%	0.71	99.00%	0.518	-20.18

Notes (1) Based on 30 second threshold; includes abandoned calls.

Notes (2) DTE has fixed this benchmark @ 95% for all companies